3701

Memorandum

To: Jere Johnson

Subject: Completed Work

Date: May 31, 2002

cc:

Attached is the following completed document:

PA ___X___ SI _____ Other with Sampling

Site Name: Devoe Marine Coatings Site

EPA ID: CAD 097574073

City, County, State: Riverside, Riverside, California

For EPA Use Only

Latitude: 33°59'166"N Longitude: 117°21' 03.15"W

CERCLIS Data Changes: —

EPA Decision: SI needed "L"

Archive Site: _____yes ✓ no
If yes, is another program involved? _____yes _____ no
Other program(s): _____

Lead Agency: DTSC

Approval by Site Assessment Manager: [signature]

Sign-Off Date: 9.23.02

Document Screening Coordinator: _____

Chief, States, Planning, and Assessment Office: _____

REMEDIAL SITE ASSESSMENT DECISION - EPA REGION IX

EPA ID: CAD097574073 **Site Name:** DEVOE MARINE COATINGS **State ID:** 3701

Alias Site Names:

City: RIVERSIDE **County or Parish:** RIVERSIDE **State:** CA

Refer to Report Dated: 05/31/2002 **Report Type:** PRELIMINARY ASSESSMENT 002

Report Developed by: STATE

DECISION:

- ☐ **1. Further Remedial Site Assessment under CERCLA (Superfund) is not required because:**
  - ☐ **1a. Site does not qualify for further remedial site assessment under CERCLA (No Further Remedial Action Planned - NFRAP)**
  - ☐ **1b. Site may qualify for action, but is deferred to:**
- ☒ **2. Further Assessment Needed Under CERCLA:**
  - **2a. Priority:** ☐ **Higher** ☒ **Lower**
  - **2b. Other: (recommended action)** Low

DISCUSSION/RATIONALE:

Site has groundwater contamination with benzene, toluene, ethylbenzene, and xylenes from industrial processes above drinking water standards. Wells within 4 miles of the site provide drinking water to 220,000 people. Soil vapor extraction system has operated at the site since 1994. Santa Ana Regional Water Quality Control Board has closed the site despite evidence of significant groundwater contamination.

Site Decision Made by: J. JOHNSON

Signature: _____ **Date:** 09/23/2002

EPA Form # 9100-3

3701

PRELIMINARY ASSESSMENT WITH SAMPLING

Site Name:

DEVOE MARINE COATINGS

2625 Durahart Street
Riverside, California 92502

Site EPA ID Number:

CAD 097574073

Submitted to:

Ms. Jere Johnson, State Project Officer

U.S. Environmental Protection Agency - Region IX, Superfund Program

Date:

May 31, 2002

Prepared by:

Greg Sweel, Senior HS Engineering Geologist

Rania Zabaneh, Hazardous Substances Engineer

Cal EPA / DTSC

Grant Number:

V-999-252-03

Review and Concurrence:

Greg Holmes, Unit Chief

Site Mitigation Cleanup Operations Program
Cal EPA / DTSC

revised September 2002

1.0 INTRODUCTION

The U.S. Environmental Protection Agency (EPA), Region IX, under the authority of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) and the Superfund Amendments and Reauthorization Act of 1986 (SARA), has tasked California Environmental Protection Agency's Department of Toxic Substances Control (DTSC) to conduct a preliminary assessment (PA) of the Devoe Marine Coatings site in Riverside, Riverside County, California.

The purpose of the PA is to review existing information on the site and its environs to assess the threat(s), if any, posed to public health, welfare, or the environment and to determine if further investigation under CERCLA/SARA is warranted. The scope of the PA includes the review of information available from federal, state, and local agencies and performance of an onsite reconnaissance visit.

Using these sources of existing information, the site is then evaluated using the EPA's Hazard Ranking System (HRS) criteria to assess the relative threat associated with actual or potential releases of hazardous substances at the site. The HRS has been adopted by the EPA to help set priorities for further evaluation and eventual remedial action at hazardous waste sites. The HRS is the primary method of determining a site's eligibility for placement on the National Priorities List (NPL). The NPL identifies sites at which the EPA may conduct remedial response actions. This report summarizes the findings of these preliminary investigative activities.

Devoe Marine Coatings was identified as a potential hazardous waste site and entered into the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) as of October 26, 1990 (CAD097574073). A PA was first conducted on the Site on April 27, 1993. It is listed as a large generator on the Resource Conservation and Recovery Information System (RCRIS) as of March 13, 2002.

1.1 Apparent Problem

Devoe Marine Coatings (Devoe) operated six underground storage tanks (USTs) from 1952 until 1983. These tanks were used to store several chemical products including: xylene; toluene; and mineral spirits. Integrity tests conducted on the tanks in 1984 indicated that two of the tanks had leaks. Since then, several soil and groundwater investigations have been conducted on the site to determine the nature and extent of contamination.

Soil samples taken from borings located adjacent to, and below, the USTs have revealed elevated levels of benzene, toluene, ethylbenzene, xylenes, n–butanol, and n-butyl acetate. These compounds were constituents of chemicals stored in the USTs on the Site.

Sampling from on-site groundwater monitoring wells has revealed benzene, toluene, ethylbenzene and xylene contamination above EPA-established health-based benchmark levels. Additionally, tetrachloroethene (PCE), 1,1-dichloroethene (DCE), 1,1,1-trichloroethane (TCA), and trichloroethene (TCE) have also been detected in groundwater. According to a former Devoe employee, chlorinated solvents have been used infrequently in facility operations and stored in small quantities at the Site.

Several groundwater monitoring and soil vapor extraction wells, and a Soil Vapor Extraction (SVE) / Thermal Oxidation (TO) unit are still present, operating, and detecting residual contamination at the Site.

It is not known whether surface soils were sampled for metallic contaminants (known to have been used in paint pigments) and no site-specific background levels for metals in soil have been established.

In a letter dated November 8, 2000, the County of Riverside, Department of Environmental Health (CRDEH), issued a complaint to Devoe's consultant (Golder Associates, Inc.) regarding the improper disposal of waste paint into a pit near the facility's fence line.

Sampling conducted during this preliminary assessment revealed that total xylenes (ortho, para, and meta) and lead presently exist in the groundwater and soil, respectively.

2.0 SITE DESCRIPTION

2.1 Location

The Site is located at 2625 Durahart Street in Riverside , California. The geographic coordinates of the site are 33°59' 16.6" N latitude and 117° 21' 03.15" W longitude (Township 2S, Range 5W, Section 24, San Bernardino Baseline and Meridian, Riverside, 7.5-minute quadrangle). The location of the Site is shown in Figure 2-1 (Site Location Map).

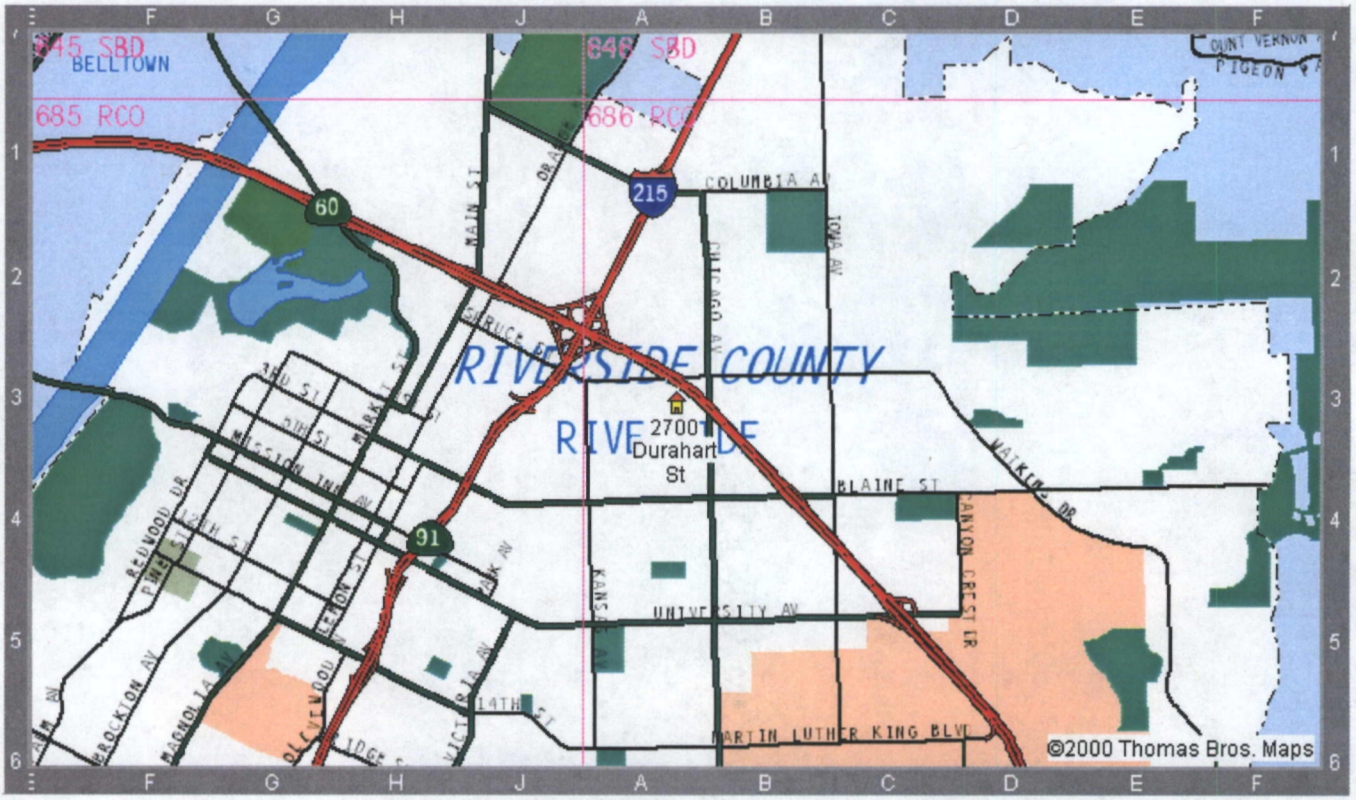

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Figure 2-1 Site Location
Devoe Marine Coatings
2625 Durahart Street, Riverside, California 92502

2.2 Site Description

The site occupies approximately 7.5 acres in a light industrial and commercial area. The site is bordered on the north by U.S. Interstate 60, on the west by Hulen Place, on the south by Massachusetts Avenue, and on the east by Durahart Street. The facility map is shown in Figure 2-2 (Site Location). Land use immediately around the site is commercial and light industrial. Specifically, Ferguson Heating and Cooling Division is to the south of the Site. U-Haul truck rental company is to the north of the Site. An abandoned cement plant is west of the Site. A welding facility, a printing facility, and several other commercial buildings are also in the immediate vicinity of the Site. Vegetation is sparse, and the Site does not appear to provide habitat for fauna. All former buildings were demolished and removed in early 2000. The only remaining surface features are a soil vapor extraction system and an associated thermal oxidation unit. The Site is located on alluvial materials consisting mainly of sand-sized particles with minor silts and gravels. The topography of the Site is flat. The Site is located within ½ mile of the Riverside Canal which is the nearest surface water body. The site layout, including former building locations, is shown in Figure 2-3 (Site Layout Map).

The Site formerly consisted of a two-story manufacturing building and several single-story buildings. The site historic layout is shown in Figure 2-3. The Site was asphalt-paved at one time; however, since the buildings were removed the Site is now dirt covered. Historically, there was a dirt area located near the employee parking lot. The Site is partially surrounded on the north and the west by a low concrete retaining wall. The southern and eastern perimeters of Devoe are enclosed by a gated and locked chain-link fence topped with barbed wire. These access gates are the only entrances to the facility.

Devoe had two above-ground storage tank farms, which were in use since 1981. One storage tank farm was used to hold resins, and the other was used for solvent storage. Both of the storage tank farms were placed on concrete pads and surrounded by 3-foot concrete berms. The berms served as a secondary spill containment feature. The solvent above ground storage tank farm had a total of 10 tanks of various capacities. Three 8,000-gallon tanks were used to store methyl isobutyl ketone (MIBK), mineral spirits, and xylene. Two 5,000 gallon tanks were used to store naptha, and wash solvent (50 percent methyl n-amyl ketone and 50 percent xylene). A single 3,000-gallon tank was used to store mineral spirits. A single 10,000-gallon tank was used to store methyl n-amyl ketone. Two tanks having capacities of 10,000 gallons were used to store storm water. The remaining single 6,000-gallon tank contained an unknown solvent. The above-ground resin storage tank farm also consisted of 10 tanks. Four 10,000-gallon tanks were used to store cellusolve, epoxy resin, alkyd, resin, and n-butanol. Two 5,000-gallon and two 16,000-gallon tanks were also used for alkyd resin and epoxy resin storage. The two remaining 10,000-gallon tanks contained unknown resins. The Site also operated a solvent recycling (distillation) area and a drum/tub cleaning area.

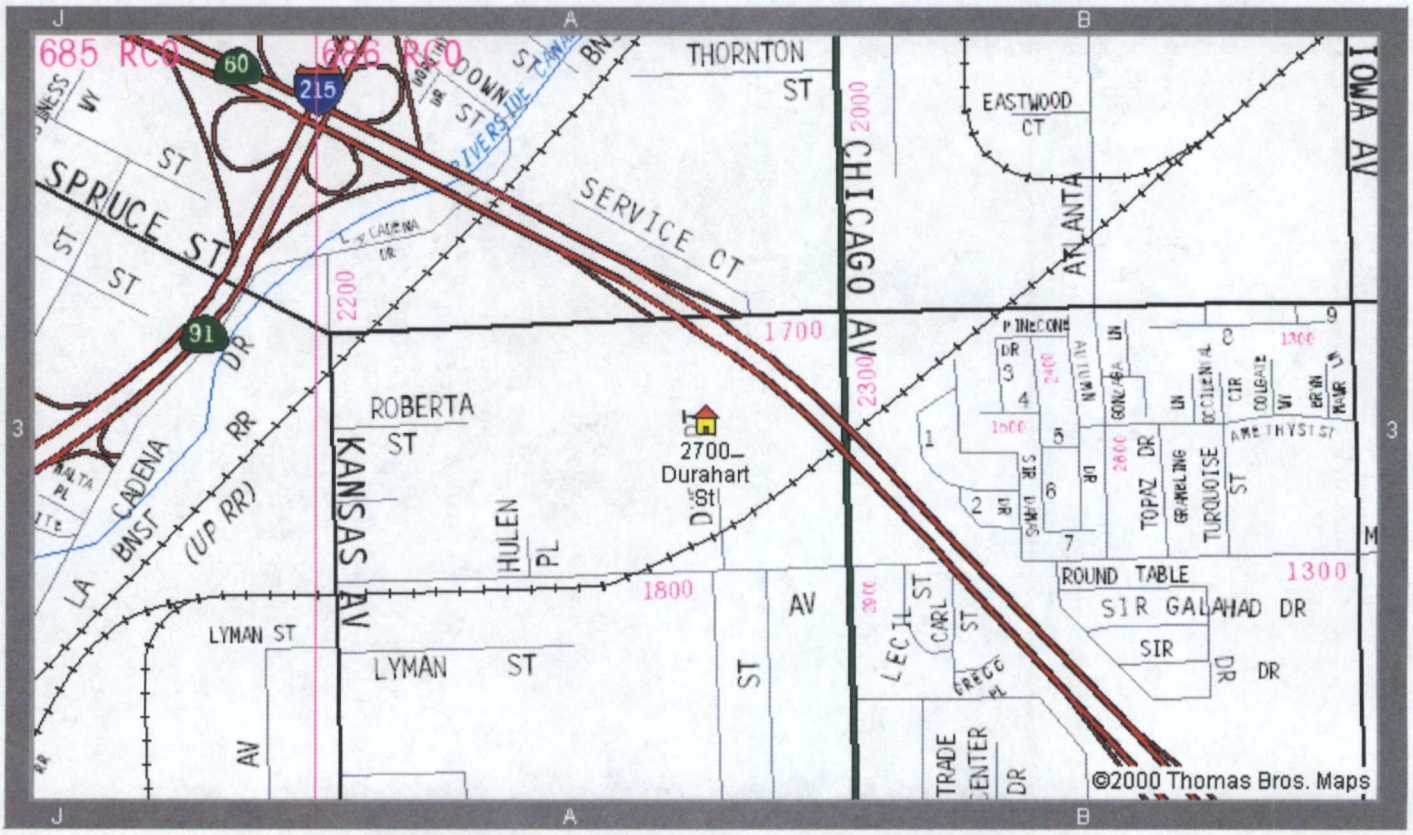

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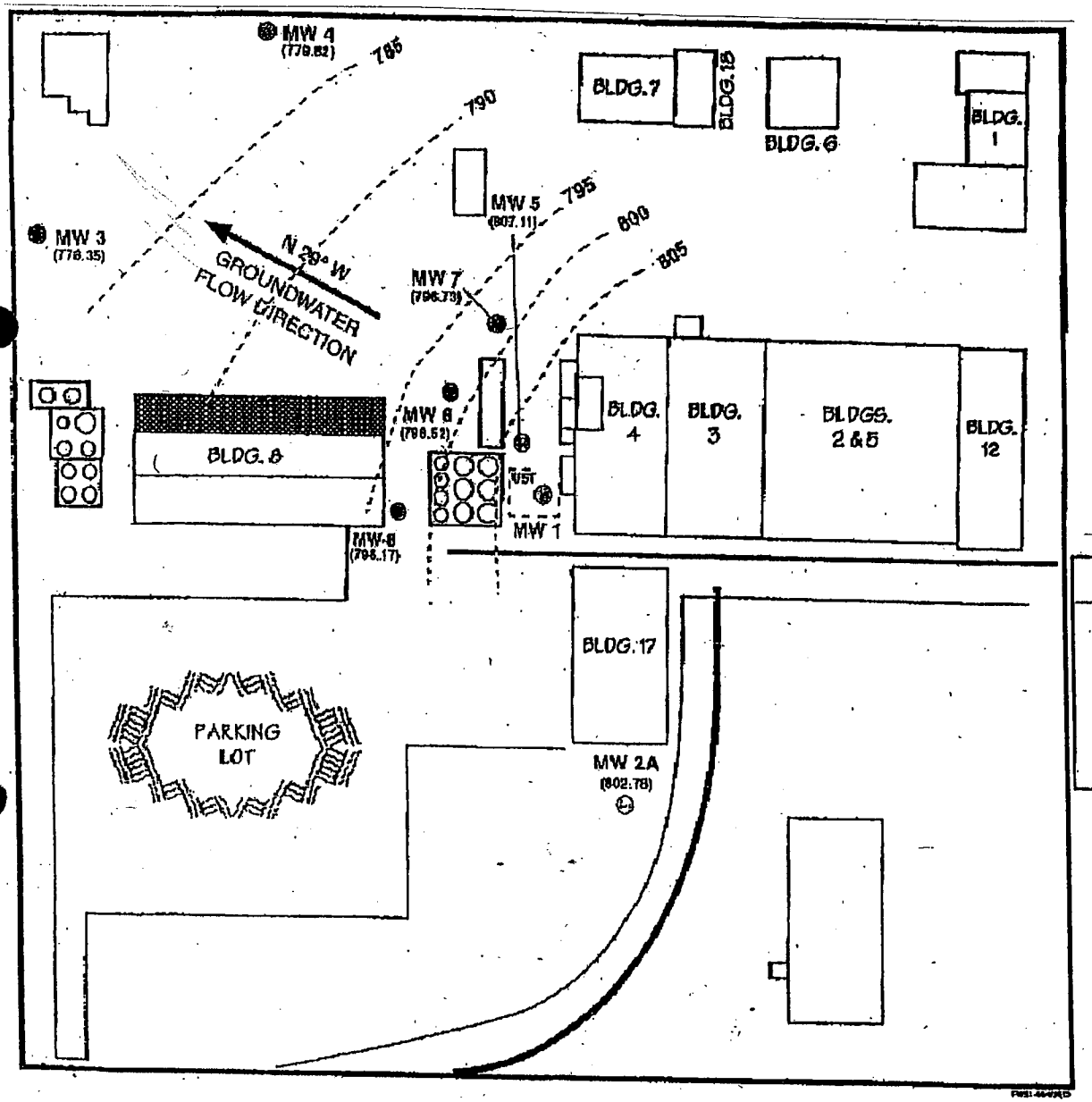
Figure 2-2 Site Location
Devoe Marine Coatings
2625 Durahart Street, Riverside, California 92502



LEGEND

(802.78) GROUNDWATER MONITORING WELL AND GROUNDWATER ELEVATION IN FEET ABOVE MEAN SEA LEVEL.

LINE OF EQUAL GROUNDWATER ELEVATION ABOVE MEAN SEA LEVEL

Measured April 21, 1997

0 50 100

APPROXIMATE SCALE IN FEET

N

Figure 2-3 Site Layout
Devoe Marine Coatings
2625 Durahart Street, Riverside, California 92502

2.3 Operational History

The Devoe facility was constructed in 1952. It is unknown what the property was used for prior to 1952. At the time of construction, the facility was owned by Harts and Burns, Inc. (Harts & Burns). Harts & Burns manufactured paints for trade sales, marine, and industrial maintenance purposes.

In 1954, Devoe and Reynolds purchased Harts & Burns and acquired the 2625 Durahart Street facility. Devoe and Reynolds continued the manufacturing of paints at the Durahart site. Six USTs were installed at the facility in 1956. Four of these tanks had capacities of 2,000 gallons each, and two tanks had capacities of 10,000 gallons each. At the time of installation, the tanks were used to store Solvesso 15 (an aromatic hydrocarbon solvent), xylene, VM&P naphtha (an aliphatic hydrocarbon), toluene, and mineral spirits.

The Celanese Corporation purchased Devoe and Reynolds in 1964. Celanese Corporation eventually sold the trade sales paint and marine paint divisions to the Grow Group, Inc. in 1976. The industrial maintenance paint division was sold to a different company at another location. The facility at 2625 Durahart Street was named Devoe Coatings Company and was established as a division of the Grow Group, Inc. In 1995, Imperial Chemicals Industries (ICI) purchased the Grow Group division and is currently known as ICI Devoe Coatings.

Operations at Devoe consisted of batching pigments, resins, and solvents to formulate paint of a particular color. Paints were then filled into containers and made ready for distribution. Some of the most widely used solvents at Devoe included xylenes, MIBK, and n-butyl alcohol. Methyl ethyl ketone (MEK) and glycol ethers were used in comparatively smaller quantities. The facility also used several pigments. Devoe discontinued the use of chromium-based pigments in January 1992. Overall, the facility's chemical inventory consisted of over 700 different chemicals. Most of the chemicals used by the facility were stored in 55-gallon drums in an asphalt-paved yard. Larger quantities of chemicals were stored in above-ground storage tank areas.

Devoe recycled spent solvents in a solvent recovery still located in the northwest corner of the site. The solvent recovery process lead to the generation of waste residue that collected at the bottom of the still, referred to as the "still-bottom." The still-bottom usually consist of 40-60 percent 1,2,4-dimethylbenzene. During full production, approximately one 55-gallon drum of still-bottom was generated each day.

Over time, the filling of paint containers resulted in the generation of paint sludge. Solvent from the sludge was recovered before disposal. During full production, approximately one 55-gallon drum of paint sludge was generated each day. Various other hazardous wastes consisting of solvent and paint contaminated rags and uniforms and empty paint containers were also generated at Devoe. Such miscellaneous wastes were generated at the rate of approximately one 55-gallon drum

per day during periods of full production.

All of these hazardous wastes were placed in 55-gallon drums and stored in the facility's hazardous waste holding area. The hazardous waste holding area was concrete-paved and enclosed by a chain-link fence. Hazardous wastes were held at the facility for 2 to 3 months before they were removed. The hazardous wastes were transported to a Class I hazardous waste landfill for disposal while the paint sludge and the still-bottoms were transported to a cement kiln for incineration.

Waste oil was generated as the result of on-site vehicle maintenance. An independent contractor not affiliated with Devoe conducted the vehicle maintenance. Waste oil generated by the contractor in this process was never stored on-site. A record of the quantity of waste oil generated was not available from Devoe. The waste oil was reportedly removed by the contractor and taken to a recycling facility.

The topography of the Devoe facility is generally flat with a slight slope to the southwest. Hay bales, or similar sediment run-off retention devices, were placed around the southern and western site boundaries subsequent to building demolition. Historically, any runoff generated at the site would be directed to the northeastern corner of the facility. The northeastern corner was surrounded by a concrete retaining wall which prevented the escape of the runoff. Runoff accumulated in this area of the facility during a rainstorm or during cleaning activities was removed by pumping and disposed.

There were as many as 63 employees at Devoe. Operating hours were from 5:30 am until 4:30 pm Monday through Friday. The facility was closed on weekends.

2.4 Regulatory Involvement

2.4.1 U.S. Environmental Protection Agency (EPA)

Devoe Marine Coatings was identified as a potential hazardous waste site and entered into the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) as of October 26, 1990 (CAD097574073). A PA was first conducted on the Site on April 27, 1993. It is listed as a large generator on the Resource Conservation and Recovery Information System (RCRIS) as of March 13, 2002.

2.4.2 California EPA - Department of Toxic Substances Control (DTSC)

DTSC's Cypress Office has several files regarding the Devoe facility. However, since the Regional Water Quality Control Board - Santa Ana Region (RWQCB-SA) has been the lead agency for the site, DTSC has not assigned a project manager to the Site. The extent of DTSC's involvement with Devoe heretofore has been to retain files.

2.4.3 California Regional Water Quality Control Board - Santa Ana Region (RWQCB-SA)

RWQCB-SA has been the lead regulatory agency for the facility (see Section 3.1 for additional detail). RWQCB-SA reviewed and approved all workplans and environmental investigative activities at Devoe. Engineering-Science (ES), an environmental consulting company, submitted a report, *Report of Phase 1A Investigation and Conceptual Remedial Design for Devoe Coatings, Riverside*, for review to RWQCB-SA in March 1991. After reviewing the report, RWQCB-SA requested that Devoe implement a biannual sampling program for all existing monitoring wells on the property in order to monitor the contaminant levels at the site. RWQCB-SA instructed Devoe to perform the biannual sampling for a year, after which the analytical results were evaluated and further actions were discussed.

RWQCB's Well Investigation Program was studying the possibility of a regional groundwater problem in Riverside. However, due to state budget cuts, these studies were postponed.

On June 17, 1997, RWQCB-SA issued a determination of No Further Action (NFA) for the Site. The NFA was based on a review of a report titled "Draft Soil Remediation Closure Report," prepared by Parsons Engineering Science, Inc. In the Case Closure Summary letter (see Reference 2 at the end of the report), the RWQCB-SA noted that during the 18 months the soil vapor extraction system operated (September 1994 to March 1996), approximately 26,000 kilograms of hydrocarbons were removed from the vadose zone. Confirmation soil sample results collected on July 17, 1996, indicated a maximum xylene residual concentration of 688,000 parts per billion (ppb). Groundwater monitoring operated for a total of nine years (1988 through 1997). Free product

recovery was initiated on June 20, 1988 and continued until February 1996. The Case Closure Summary letter indicated that no free product had been detected since February 1996. The last reported concentrations for the following constituents in groundwater were included in the Case Closure Summary letter: benzene (less than 3,000 ppb); toluene (3,300 ppb); ethylbenzene (51,000 ppb); xylenes (760,000 ppb). These concentrations were all measured in MW-1 on July 25, 1996. The Maximum Contaminant Levels (MCLs) for drinking water for these detected constituents are as follows: benzene (5ppb), toluene (1,000 ppb), ethylbenzene (700 ppb), and xylenes (10,000 ppb).

2.4.4 South Coast Air Quality Management District

Devoe had at one time as many as 54 permits with the South Coast Air Quality Management District (SCAQMD). Devoe's SCAQMD permits were for paint blending, pigment blending, resin blending, solvent storage tanks, and resin storage tanks. Currently, the site is permitted by the SCAQMD to operate a soil vapor extraction system and thermal oxidation unit on-site.

2.4.5 County of Riverside Department of Environmental Health

In October 2000, Golder Associates Inc. (Golder) submitted a notification letter to the County of Riverside Department of Environmental Health (RCDEH) for removal of the previously closed in place USTs. On November 8, 2000 (see Reference 4 at the end of the report), RCDEH provided Golder with a letter relating a complaint of improper disposal of paint into a pit near the facilities fence line and also identifying nine locations where additional soil sampling may be warranted. RCDEH validated removal of all tanks and confirmation sampling was done in all nine locations on the Site in 2001 with non-detect results. DTSC was not provided with this data.

3.0 HAZARD RANKING SYSTEM FACTORS

Previous sampling results of soil and groundwater beneath the USTs at the Site indicated an impact by VOCs. Also, a complaint of a potentially present pit used for the improper disposal of waste paint had been issued by the RCDEH. Although free product was not detected from on-site groundwater monitoring wells recently, and concentrations of dissolved constituents were trending lower, the presence of contamination in the groundwater existed. The following medium/media were impacted by a release from the Site: First, on-site shallow soils (within 2 feet of ground surface); buildings and pavement were removed and exposed soil existed at the site. Surface and shallow soils may have contained zinc, barium, chromium, and lead-based paint pigment. Second, groundwater had been impacted by VOCs. Usable groundwater was previously encountered at about 103 feet bgs (1992).

3.1 Sources of Contamination

Underground Storage Tanks

Six USTs were installed at the facility in 1956. Four of these tanks had capacities of 2,000 gallons, and the remaining two tanks had capacities of 10,000 gallons. At the time of the installation, the tanks were used to store Solvesso 15 (an aromatic hydrocarbon, xylene, VM&P naphtha (an aliphatic hydrocarbon), toluene, and mineral spirits. The underground storage tanks were pressure tested on October 23, 1984. Two of the 2,000-gallon tanks did not pass the integrity test. All of the tanks were eventually closed in place. Beginning in 1986, soil and groundwater investigations have been conducted at Devoe to characterize the extent of contamination. The following is a summary of those activities and the analytical results for the soil and groundwater samples:

In July 1986, Geological Systems Evaluation company (Geo SEC) drilled soil borings adjacent to the UST's to depths of 40 feet below ground surface (bgs). Soil samples were collected and analyzed revealing the presence of total recoverable petroleum hydrocarbons (TRPH), benzene, toluene, ethylbenzene, xylenes, n–butyl acetate, and n-butanol. More sampling was done on November 12, 1986 at the request of the Regional Water Quality Control Board (RWQCB).

In October 1988, Geo SEC installed one monitoring well. Groundwater was encountered at 98.5 feet bgs. Groundwater samples were collected and benzene was detected, along with toluene, ethylbenzene, and xylenes. Floating product approximately 36 inches in thickness was encountered in MW-1.

In the spring of 1989, three additional monitoring wells were installed and groundwater was sampled. Results revealed the presence of trichloroethylene (TCE), dichloroethylene (DCE), chloroform, 1,1,1-trichloroethane (TCA), and tetrachloroethylene (PCE).

In October 1990, Engineering-Science (ES) installed three more groundwater monitoring wells and three vapor extraction wells. Metals analyses of the groundwater samples revealed no metals exceeding naturally occurring background levels. However levels of xylenes were revealed in one of the monitoring wells. In addition, DCE, TCA, PCE, TCE, bromomethane, and chloroform were detected.

In July 1991, the first groundwater monitoring well was analyzed again revealing levels of chlorobenzene, 1,3-dichlorobenzene, DCE, PCE, benzene, toluene, ethylbenzene, and xylenes.

Solvent Recovery Still

Devoe recycled solvents in a solvent recovery still. The solvent recovery process eventually lead to the generation of residue that collected at the bottom of the still. The

still-bottom usually consisted of 50% MIBK and 50% naphtha. The naphtha consisted of 40-60% 1,2,4-dimethylbenzene. The still-bottom was placed in 55-gallon drums and held in the hazardous materials storage area. Generally, one 55-gallon drum of still-bottom was generated daily. The 55-gallon drums were placed in the hazardous waste storage area. Hazardous wastes at Devoe were stored on-site for approximately 30 to 90 days.

Paint Filling Equipment

Over time, the filling and cleaning of containers with paint resulted in the generation of paint sludge. Paint filling took place in a concrete-paved area, surrounded by a 6-inch berm. Solvent from the sludge was recovered prior to disposal. During a full day of production, one 55-gallon drum of paint sludge was generated at Devoe.

Vehicle Maintenance

Waste oil was generated as the result of vehicle maintenance. An independent contractor not affiliated with Devoe conducted the vehicle maintenance. Waste oil generated in this process was never stored on the Site, and therefore Devoe did not maintain records of waste oil quantities generated. The waste oil was removed by the contractor and taken to a recycling facility.

Above Ground Storage Tanks

Devoe had two above-ground storage tank facilities. One storage tank facility was used to hold resins, and the other was used for solvent storage. Both of the storage tank facilities had been placed on concrete pads and were surrounded by 3-foot concrete berms which served as a secondary containment feature. The solvent above ground storage area had a total of 10 tanks, eight of which stored solvents. The other two tanks were used for storm water containment.

The above-ground tanks have been removed. At the present time, ICI (The Glidden Company) has contracted The Source Group to run a soil vapor extraction system as a remediation effort to clean up the Site. In 1997, eight (8) vapor monitoring wells were installed on site and sampled and a "No Further Action" determination was issued by the Regional Water Quality Control Board, which was the lead agency for the Site at that time.

3.2 Groundwater Pathway

3.2.1 Hydrogeological Setting

Devoe lies within the Riverside South Basin hydrologic unit. The Riverside South Basin hydrologic unit boundaries are the Riverside-San Bernardino County border to the north, the Box Spring Mountains to the southeast, the Arlington Basin to the southwest, and the Pedley Hills to the west.

The Riverside South Basin encompasses an area of approximately 40 square miles. Three geologic units exist in the basin and consist of older alluvium, younger alluvium, and river-channel deposits. Older alluvium deposits are the major source of groundwater in the Riverside South Basin.

Isolated hills of bedrock occasionally pose minor restrictions on the groundwater flow through aquifers located within the Riverside South Basin. Groundwater levels in the Riverside South Basin vary, primarily due to differences in ground surface elevations. The shallowest groundwater levels range from 100 to 129 feet below ground surface (bgs). Groundwater in monitoring wells on-site was encountered between 110 to 129 feet bgs in April 2002.

The Gage system well water, which is drawn from the Bunker Hill Basin in San Bernardino, has been used historically for irrigation in the Riverside South Basin. The Gage System well water is brought to the Riverside South Basin area via the Gage Canal System. Evaporation has led to an increase in the total dissolved solids in the canal water. This canal water is used extensively for irrigation purposes in the Riverside South Basin. As a result of irrigation water percolating into the underlying aquifer, there has been a basin-wide increase of total dissolved solids in shallow groundwater. In addition to total dissolved solids and agricultural chemicals, PCE and TCE contamination has also been detected in portions of the Riverside South Basin. For these reasons, several operable drinking water wells have been removed from service in the City of Riverside area. Drinking water for Riverside is drawn primarily from wells in San Bernardino County. Net precipitation for this area is 2.06 inches annually.

As part of the sampling efforts conducted on the site on April 30, 2002, the water levels in all 8 monitoring wells on the site were measured to determine the direction of the groundwater flow. Refer to Figure 2-3 for the location of the monitoring wells. A Photoionization Detector (PID) was used to detect any VOCs at the wellhead. The table below indicates that VOC concentrations at the wellhead were similar to the background. (Refer to Attachment E in the Sampling Plan for calibration information). A 300-foot Solinst electronic sounder (serial # 778786) was used to make the water level measurements. The following table documents the readings collected at each monitoring well:

MW #	Time of Reading	Background PID Reading	PID Reading at Wellhead	Depth
MW-1	11:48 pm	0	1	110.58 ft
MW-2A	10:45 pm	0	0	111.74 ft
MW-3	11:00 pm	0	1	127.76 ft

MW-4	11:10 pm	0	1	128.70 ft
MW-5	11:40 pm	0	0.1	110.54 ft
MW-6	11:35 pm	0	0	118.00 ft
MW-7	11:28 pm	0	1	117.83 ft
MW-8	11:20 pm	0	0.1	117.34 ft

From the locations of the monitoring wells and the depth measurements at each well, groundwater flow is considered to move in a northwesterly direction. (Note: Assumed the surveyed well elevation reference datum was accurate). Also, the SVE system was operating when water level measurements were made and the resultant measurements may not reflect static conditions.

Groundwater samples were collected from monitoring wells MW-1 and MW-5. These particular wells are in close proximity to the former UST area and have historically been the most consistently impacted by site related constituents. Two (2) samples were analyzed for VOCs, while another two (2) were analyzed for a full scan of metals. No free product or visible sheen was encountered in either well. EPA Method 8260 was chosen for VOC analyses, while EPA Method 6010 was chosen for metals scan. Sample analysis was conducted by DTSC's Hazardous Materials Laboratory (HML) in Berkeley, California. Total xylenes were detected at a concentration of 102,000 μg/l in MW-1, but were not detected above laboratory quantitation limits of 5 μg/l in MW-5. Total chromium was detected at a concentration of 198 μg/l in MW-1 and 184 μg/l in MW-5. The Federal MCL for total chromium is 100 μg/l (In California, the MCL is 50 μg/l). Refer to the laboratory analytical results provided in Appendix G (Analytical Results).

3.2.2 Groundwater Targets

Local municipal water purveyors include the City of Riverside Water Department, Rubidoux Community Service District, and Riverside Highland Water Company. Other water purveyors and drinking water well company owners were identified but could not be located or contacted because there was no information leading to their whereabouts. Those included: Mutual Water Company, Warsaw Water Company, Canale Foods, Riverside Cement Company, Certainteed Products, Elm Trailer Park, and Rancho Jurupa Park.

The nearest drinking water well is Russell C operated by the City of Riverside Water Department (RWD). The RWD operates a blended drinking water system that consists of 48 wells, of which 6 are active and the rest are inactive, destroyed, boosters, gages, Agriculture leased, etc. This system serves approximately 260,000 people. The RWD obtains 70% of its drinking water from the groundwater. The remaining 30% of the drinking water is from surface water. Six (6) of the forty-eight (48) wells operated by RWD are within 4 miles of the Site.

The Rubidoux Community Service District (RCSD) operates a drinking water system that consists of Fourteen (14) wells that serve approximately 24,500 people. The RCSD obtains 100% of its water from the groundwater. Seven (7) of the fourteen (14) wells operated by RCSD are active within 4 miles of the Site.

The Riverside Highland Water Company (RHWC) operates a drinking water system that consists of eight (8) domestic wells that serve approximately 14,500 people and five (5) irrigation wells. The RHWC obtains 100% of its drinking water from the groundwater. The three (3) of the fourteen (14) wells operated by RHWC are within 4 miles of the Site.

3.2.3 Groundwater Pathway Conclusion

Devoe lies within the Riverside South Basin hydrologic unit. Groundwater in the vicinity of the site was encountered at a depth of 110 feet below ground surface. The vadose zone is composed of alluvial materials consisting mainly of permeable sand-sized particles, with minor silt and gravel. Municipal groundwater wells within 4 miles of the Devoe facility supply drinking water to a population of approximately 32,729 people. The nearest drinking water well is Russell C which is 1 to 2 miles from the Site and is operated by the City of Riverside. Sampling of 2 monitoring wells on the site were conducted during this PA in accordance with procedures described in the Field Sampling Plan (FSP) - (See Appendix F: Sample Plan). Groundwater contamination attributable to the Site has been detected in these groundwater monitoring wells located on the Site. Total xylenes (includes: meta, para, and ortho isomers) were detected at a concentration of 102,000 μg/l in MW-1. The MCL for total xylenes is 10,000 μg/l. Xylene was not detected above the laboratory quantitation limit (5 μg/l) in MW-5. Elevated concentrations of iron, total chromium, and nickel were also detected in both MW-1 and MW-5. It is not known whether the presence of these constituents can be attributed to well construction materials, naturally occurring (background) levels, or site related contamination. Laboratory analytical results are provided in Appendix G (Analytical Results).

3.3 Surface Water Pathway

3.3.1 Hydrological Setting

The Riverside Canal, the Gage Canal, the Tequesquite Arroyo, and Lake Evans are all located within 2 miles of the Devoe site. The Riverside Canal is located approximately 0.5 mile to the northwest of the Devoe facility. The Gage Canal is located approximately 1 mile to the east of the Site. The Tequesquite Arroyo is located approximately 1.75 miles to the south. Lake Evans is located approximately 1.5 miles to the northwest of Devoe. The Riverside and Gage Canals are concrete-lined and transport irrigation water. The Tequesquite Arroyo is an intermittent stream. The facility is located in an area of minimal flooding.

The former buildings have been demolished and cleared of all potential sources of contamination. It is currently unpaved, except for an asphalt access road to the vapor extraction system. There is generally sparse vegetation consisting mainly of russian thistle (tumble weeds) along the property margins. Hay bales, or similar sediment run-off prevention devices, have been placed around portions of the southern, eastern, and western site boundaries subsequent to building demolition. A concrete retaining wall surrounds portions of the northern and western site boundary. There is no suspected release to surface water.

The 2-year, 24-hour maximum rainfall for Devoe is 1.9 inches.

3.3.2 Surface Water Targets

The Riverside Canal is the nearest surface water body to the Devoe site. It is located approximately 0.5 mile northwest of Devoe. It is a concrete-lined irrigation canal. The Gage Canal is located approximately 1 mile east of Devoe. It is a concrete-lined canal that transports irrigation water to the surrounding agricultural lands. Lake Evans is a fresh-water lake located approximately 1.5 miles to the northwest of Devoe. Lake Evans is used for contact and non-contact recreation, including swimming and fishing. The Tequesquite Arroyo is an intermittent stream located approximately 1.75 miles to the south of Devoe. The Tequesquite Arroyo is used intermittently for fishing and swimming. Surface water is not used as a source of drinking water within 2 miles of the Devoe site.

3.3.3 Surface Water Pathway Conclusion

There are four surface water bodies within 2 miles of the Devoe site. However, the surface water runoff should not pose a threat to the surrounding water bodies because there is no suspected release to the surface water. Surface water runoff essentially percolates into the ground and a sediment runoff prevention system exists at the facility to contain any site related contamination. The nearest surface water body is a concrete-lined canal that is used to transport irrigation water. For the following reasons, the surface water pathway is not a pathway of concern at the Devoe site: a surface water/sediment runoff control system exists on-site; the nearest surface water body is a concrete-lined canal used for transporting only irrigation water; and surface water is not used as a source of drinking water within 2 miles of the site.

3.4 Soil Exposure And Air Pathway

3.4.1 Physical Conditions

The Site formerly consisted of a two-story manufacturing building and several single-story buildings. The Site was asphalt-paved at one time. However, since the buildings were removed in 2000, the Site is now dirt covered. The Site is partially surrounded on the north and west by a concrete retaining wall and chain-link fence. The southern and eastern perimeters of Devoe are enclosed by a chain-link fence, which is looped with

barbed wire. The fence has two controlled access gates. These access gates restrict entry into the facility.

During this Preliminary Assessment (PA) project, on April 30, 2002, soil samples were collected at six (6) different locations, selected in areas formerly occupied by the hazardous waste storage area, pigment storage area, fence line (suspected improper disposal area), and drum/tub rinsing area. At each location, a sample was taken at the surface and at approximately one (1) foot bgs. Three (3) additional sample were taken in areas not suspected of being impacted by facility operations to evaluate site-specific background for metals. For one of these locations, an additional sample was taken as a field duplicate sample to test for variability and quality assurance and quality control (QA/QC) of the analytical methods used.

All the soil samples were collected using disposable plastic scoops and placed into 4 ounce glass jars with Teflon-lined, screw caps. Refer to Appendix F (Sample Plan) Table 7-1 for the PA field sample log. Thirteen (13) of the soil samples were analyzed for metals, which included the duplicate, and three (3) were background soil samples analyzed for metals. DTSC conducted this field sampling effort to gather data as part of a PA under CERCLA. Refer to Appendix G (Analytical Results) for the actual field sampling procedures followed and an explanation of the results achieved.

3.4.2 Soil Exposure and Air Targets

There are no workers on this Site since the buildings have been demolished. No schools, daycare centers, nor any sensitive environments are on the property or within 200 feet of the contamination associated with the Site. There are approximately 15,000 people living within a one-mile distance of the Site (17). The only potential concern is that since the buildings have been demolished and the soil is exposed, dust particles could migrate to nearby businesses. Thus, soil exposure likelihood was considered in the Hazard Ranking Score of this Site.

3.4.3 Soil Exposure and Air Pathway Conclusions

Based on the results of soil sampling, a release of lead, total chromium, copper, and zinc into the soil has been established at the Site (See Appendix G). Lead has been detected at the site at concentrations as high as 801 mg/kg. The average background concentration of lead was determined to be 8.18 mg/kg, while the Preliminary Remediation Goals (PRGs) for Lead at the residential level in soil is 400 mg/Kg. In addition to the elevated lead concentrations, surface sample location SS-3 also contained elevated concentrations of total chromium, copper, and zinc at 163 mg/Kg, 843 mg/Kg, and 619 mg/Kg, respectively. The average background concentrations for these same metals were determined to be 12.84 mg/Kg, 11.98 mg/Kg, and 46.3 mg/Kg respectively. This sample location was placed along the north retaining wall in the approximate area that a complaint of improper disposal of waste paint into a pit identified. The PRGs for a residential scenario for total chromium, copper, and zinc at the residential level in soil are 210mg/Kg, 2,900 mg/Kg, and 23,000 mg/Kg,

respectively. Laboratory analytical results are provided in Appendix G (Analytical Results). For HRS purposes, a release is indicated when the concentration of contaminants are present at three (3) times the background concentrations.

No releases to air have been established. Currently, the site is permitted by the SCAQMD to operate a soil vapor extraction system and thermal oxidation unit on-site.

The most recently available data, collected on May 6, 1999, indicates that the soil vapor extraction system continues to remove VOCs from the subsurface. Field screening results report total VOCs from extraction well #6 (EW-6) at a concentration of 3,712 parts per million by volume (ppmv). The influent concentration to the thermal oxidizer unit was reported as 685 ppmv and the effluent concentration was 16.5 ppmv. Speciated VOC data was collected on February 4, 1999. Samples collected and analyzed by a fixed laboratory indicated concentrations of total xylenes from EW-6 at 190 ppmv. Benzene was not reported in EW-6 above the detection limit of 0.8 ppmv. Total petroleum hydrocarbons, reported as gasoline (TPH-g) was reported in EW-6 at a concentration of 390 ppmv. (See Reference 3 at the end of this PA report)

4.0 EMERGENCY RESPONSE CONSIDERATIONS

The National Contingency Plan [40 CFR 300.415 (b) (2)] authorizes the EPA to consider emergency response actions at those sites that pose an imminent threat to human health or the environment. For the following reasons, a referral to Region IX's Emergency Response Office does not appear to be necessary:

1. Currently, the site is non-operational.

2. Aboveground and underground storage tanks have been removed.

3. The facility is surrounded on the north and west by a concrete retaining wall. The southern and eastern perimeters of Devoe are enclosed by a chain-link fence, which is looped with barbed wire. The fence has two controlled access gates. These gates restrict entry into the facility.

4. Surface water bodies near the site are concrete-lined and carry water only for irrigation purposes.

5.0 SUMMARY

The California Environmental Protection Agency's Department of Toxic Substances Control (DTSC) has conducted a preliminary assessment (PA) of the Devoe Marine Coatings site located at 2625 Durahart Street in the City of Riverside, Riverside County, California. The site occupies approximately 7.5 acres in a light industrial and commercial area. The site is bordered on the north by U.S. Interstate 60, on the west

by Hulen Place, on the south by Massachusetts Avenue, and on the east by Durahart Street. The Site is located on alluvial materials consisting mainly of sand-sized particles with minor silts and gravels. The topography of the Site is flat.

The Devoe facility was constructed in 1952. It is unknown what the property was used for prior to 1952. The facility manufactured paints for trade sales, marine, and industrial maintenance purposes. Operations consisted of batching pigments, resins, and solvents to formulate paint of a particular color. Paints were then filled into containers and made ready for distribution. Several entities have owned and operated the facility since construction. The current property owner is Imperial Chemicals Industries (ICI) and they operated the facility as ICI Devoe Coatings. All building were demolished in the year 2000. The only remaining surface features are a soil vapor extraction system and an associated thermal oxidation unit. The facility operated six USTs from 1952 until 1983. These tanks were used to store several chemical products including: xylene; toluene; and mineral spirits. The facility had two above-ground storage tank farms, which contained ten tanks each and were in use since 1981. One storage tank farm was used to hold resins, and the other was used for solvent storage. The facility also utilized a solvent recycling/distillation unit and a drum/container rinsing unit.

The California Environmental Protection Agency's Santa Ana Regional Water Quality Control Board (RWQCB-SA) has been the lead regulatory agency for the facility. On June 17, 1997, RWQCB-SA issued a determination of No Further Action (NFA) for the Site. The Case Closure Summary letter indicated that no free product had been detected since February 1996. Maximum reported concentrations for the following constituents in groundwater were included in the Case Closure Summary letter: benzene (less than 3,000 ppb); toluene (3,300 ppb); ethylbenzene (51,000 ppb); total xylenes (760,000 ppb). These concentrations were all measured in MW-1 on July 25, 1996. Although an NFA was issued in 1997, ICI continues to operate a soil vapor extraction system and an associated thermal oxidation unit at the site.

The existing site information has been reviewed and evaluated using the EPA's Hazard Ranking System (HRS) criteria to assess the relative threat associated with actual releases of hazardous substances at the site. The HRS has been adopted by the EPA to help set priorities for further evaluation and eventual remedial action at hazardous waste sites. The HRS is the primary method of determining a site's eligibility for placement on the National Priorities List (NPL). The NPL identifies sites at which the EPA may conduct remedial response actions.

The following pertinent Hazard Ranking System factors are associated with the site:

1. An observed release to the groundwater has been established based on historical site operations information and sampling results that indicate the usage and presence of VOCs and possibly heavy metals. Results of the April 2002 sampling effort by DTSC and overseen by ICI consultants indicated the presence of total xylene in monitoring well MW-1 located within the former UST area at a concentration of 102,000 μg/L. The

MCL for total xylenes is 10,000 μg/l. The release is attributable to the ICI Devoe Coatings site because the former USTs contained xylenes, the USTs were found to have leaked, floating product has been historically detected in this well, and xylenes have been historically detected in this monitoring well. The monitoring well in which the release was detected is screened in the regional aquifer which is used for local water purveyors for their source of drinking water. The majority of drinking water supplied by the City of Riverside is obtained from wells, and wells within 4 miles of the facility supply drinking water to approximately 220,997 people.

2. An observed release to the soil has been established based on results of sampling conducted during April 2002 by DTSC and overseen by ICI consultants. Analytical results indicated the presence of metals (lead, total chromium, copper, and zinc) in sampling location SS-3 at concentrations significantly above background levels. Lead was detected at the site at concentrations as high as 801 mg/kg. The average background concentration of lead was determined to be 8.18 mg/kg. Soil contamination at the site is surficial in nature. The site is not paved, except for an asphalt access road to the soil vapor extraction system and thermal oxidizer unit.

REMEDIAL SITE ASSESSMENT DECISION - EPA REGION 9

Site Name: Devoe Marine Coatings **EPA ID #:** CAD097574073

Alias Site Names:

City: Riverside **County or Parish:** Riverside **State:** California

Refer to Report Dated: 5/31/2002 **Report Type:** Preliminary Assessment Report with Sampling

Report developed by: Greg Sweel & Rania A. Zabaneh, Cal EPA / Dept. of Toxic Substances Control

DECISION:

☐ **1. Further Remedial Site Assessment under CERCLA (Superfund) is not required because:**

☐ 1a. Site does not qualify for further remedial site assessment under CERCLA (No Further Action - NFA) and:

☐ EPA is retaining this site in CERCLIS because the Federal Superfund program still has an interest in the site.

☐ EPA is archiving this site in CERCLIS because it does not warrant Federal Superfund action, or an appropriate Federal Superfund response action has been completed. This means that EPA believes no further Federal Superfund response is appropriate. Archived sites may be returned to the CERCLIS site inventory if new information necessitating further Federal Superfund consideration is discovered.

☐ 1b. Site may qualify for further action, but is deferred to: ☐ RCRA ☐ NRC

☐ **2. Further Assessment Needed Under CERCLA**

2a. (Optional) Priority:
☐ Higher ☒ Lower

2b. Activity Type
☐ PA ☐ ESI
☒ SI ☐ HRS evaluation ☐ Other _____

DISCUSSION/RATIONALE:

Site has groundwater contamination with benzene, toluene, ethyl-benzene, and xylenes from industrial processes above drinking water standards. Wells within 4 miles of the site provide drinking water to 220,000 people. Soil vapor extraction system has operated at the site since 1994. Santa Ana Regional Water Quality Control Board has closed the site despite evidence of significant groundwater contamination.

Report Reviewed, Approved and Site Decision Made by: J. Johnson **Signature:** [signature] **Date:** 9.23.02

United States Environmental Protection Agency
Office of Solid Waste and Emergency Response
Publication 9345.4-03FS
September 1993

EPA

SITE ASSESSMENT:
Evaluating Risks at Superfund Sites

Office of Emergency and Remedial Response
Hazardous Site Evaluation Division 5204G

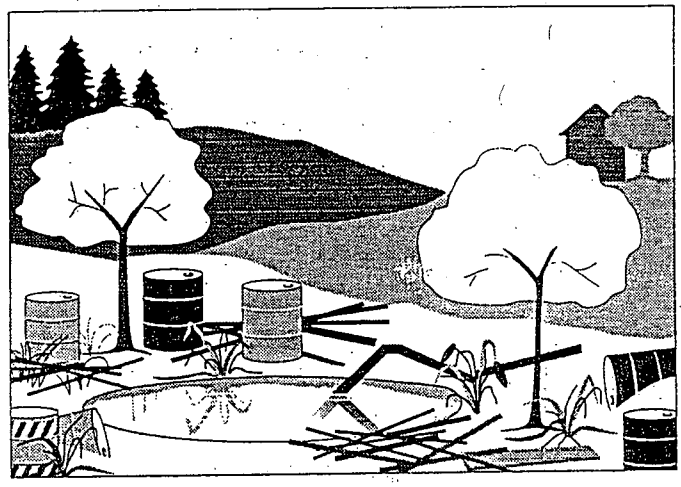
Quick Reference Fact Sheet

The Challenge of the Superfund Program

A series of headline-grabbing stories in the late 1970s, such as Love Canal, gave Americans a crash course in the perils of ignoring hazardous waste. At that time, there were no Federal regulations to protect the country against the dangers posed by hazardous substances (mainly industrial chemicals, accumulated pesticides, cleaning solvents, and other chemical products) abandoned at sites throughout the nation. And so, in 1980 Congress passed the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), commonly known as Superfund, to address these problems.

The major goal of the Superfund program is to protect human health and the environment by cleaning up areas, known as "sites," where hazardous waste contamination exists. The U.S. Environmental Protection Agency (EPA) is responsible for implementing the Superfund program.

At the time it passed the Superfund law, Congress believed that the problems associated with uncontrolled releases of hazardous waste could be handled in five years with $1.6 billion dollars. However, as more and more sites were identified, it became apparent that the problems were larger than anyone had originally believed. Thus, Congress passed the Superfund Amendments and Reauthorization Act (SARA) in 1986. SARA expanded and strengthened the authorities given to EPA in the original legislation and provided a budget of $8.5 billion over five years. Superfund was extended for another three years in 1991.



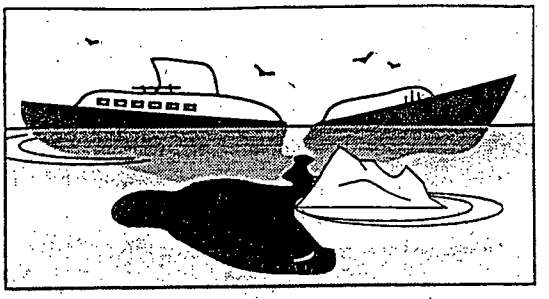
What is EPA's Job at Superfund Sites?

For more than 10 years, EPA has been implementing the Superfund law by:

- Evaluating potential hazardous waste sites to determine if a problem exists;
- Finding the parties who caused the hazardous waste problems and directing them to address these problems under EPA oversight or requiring them to repay EPA for addressing these problems; and
- Reducing immediate risks and tackling complex hazardous waste problems.

The Superfund site assessment process generally begins with the discovery of contamination at a site and ends with the completion of remediation (i.e., cleaning up the waste at a site) activities. This fact sheet explains the early part of the process, called the *site assessment* phase.

The National Response Center



The National Response Center (NRC), staffed by Coast Guard personnel, is the primary agency to contact for reporting all oil, chemical, and biological discharges into the environment anywhere in the U.S. and its territories. It is responsible for:

- Maintaining a telephone hotline 365 days a year, 24 hours a day;
- Providing emergency response support in specific incidents; and
- Notifying other Federal agencies of reports of pollution incidents.

To report a pollution incident, such as an oil spill, a pipeline system failure, or a transportation accident involving hazardous material, call the NRC hotline at **800-424-8802.**

1 Site Discovery

Hazardous waste sites are discovered in various ways. Sometimes concerned residents find drums filled with unknown substances surrounded by dead vegetation and call the NRC, EPA, or the State environmental agency; or an anonymous caller to the NRC or EPA reports suspicious dumping activities. Many sites come to EPA's attention through routine inspections conducted by other Federal, State, or local government officials. Other sites have resulted from a hazardous waste spill or an explosion. EPA enters these sites into a computer system that tracks any future Superfund activities.

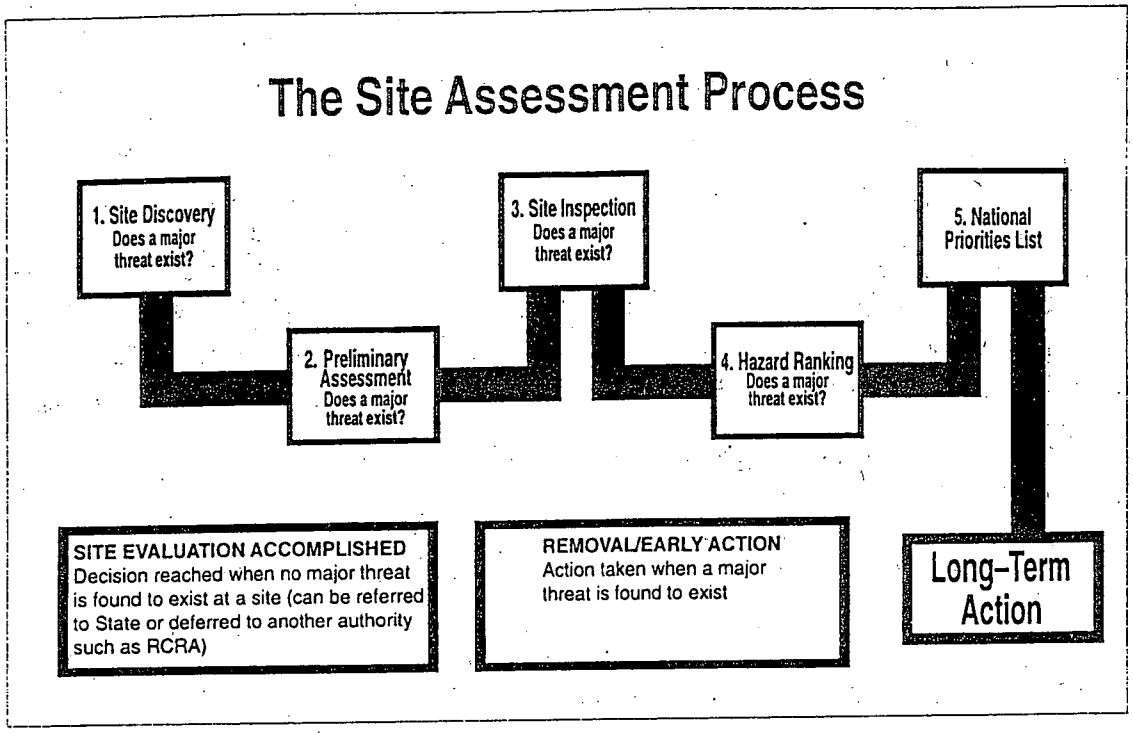
2 Preliminary Assessment

After learning about a site, the next step in the site assessment process is to gather existing information about the site. EPA calls this the *preliminary assessment.* Anyone can request that a preliminary assessment be performed at a site by petitioning EPA, the State environmental agency, local representatives, or health officials.

During the preliminary assessment, EPA or the State environmental agency:

- Reviews available background records;
- Determines the size of the site and the area around it;
- Tries to determine whether hazardous substances are involved;
- Identifies actual or potential pollution victims, such as the nearby population and sensitive environments;
- Makes phone calls or interviews people who may be familiar with the site; and
- Evaluates the need for early action using EPA's removal authority.

By gathering information and possibly visiting the site, EPA or the State environmental agency is able to determine if major threats exist and if cleanup is needed. Many times, the preliminary assessment indicates that no major threats exist.



However, if hazardous substances do pose an immediate threat, EPA quickly acts to address the threat. When a site presents an immediate danger to human health or the environment—for example, there is the potential for a fire or an explosion or the drinking water is contaminated as a result of hazardous substances leaking out of drums—EPA can move quickly to address site contamination. This action is called a *removal* or an *early action*. Additional information on early actions can be found on page 4.

EPA or the State environmental agency then decides if further Federal actions are required. Of the more than 35,000 sites discovered since 1980, only a small percentage have needed further remedial action under the Federal program.

A report is prepared at the completion of the preliminary assessment. The report includes a description of any hazardous substance release, the possible source of the release, whether the contamination could endanger people or the environment, and the pathways of the release. The information outlined in this report is formed into hypotheses that are tested if further investigation takes place. You can request a copy of this report once it becomes final— just send your name and address to your EPA regional Superfund office. See page 8 for further information on these contacts.

Sometimes it is difficult to tell if there is contamination at the site based on the initial information gathering. When this happens, EPA moves on to the next step of the site assessment, called the *site inspection*.

Making Polluters Pay

One of the major goals of the Superfund program is to have the responsible parties pay for or conduct remedial activities at hazardous waste sites. To accomplish this goal, EPA:

- Researches and determines who is responsible for contaminating the site;
- Issues an order requiring the private parties to perform cleanup actions with EPA oversight; and
- Recovers costs that EPA spends on site activities from the private parties.

Removals/Early Actions

EPA can take action quickly if hazardous substances pose an immediate threat to human health or the environment. These actions are called *removals* or *early actions* because EPA rapidly eliminates or reduces the risks at the site. EPA can take a number of actions to reduce risks, including:

- Fencing the site and posting warning signs to secure the site against trespassers;
- Removing, containing, or treating the source of the contamination;
- Providing homes and businesses with safe drinking water; and, as a last resort,
- Temporarily relocating residents away from site contamination.

"EPA can take action quickly if hazardous substances pose an immediate threat to human health or the environment."

3 Site Inspection

If the preliminary assessment shows that hazardous substances at the site may threaten residents or the environment, EPA performs a site inspection. During the site inspection, EPA or the State collects samples of the suspected hazardous substances in nearby soil and water. EPA may initiate a concurrent SI/remedial investigation at those sites that are most serious and determined early as requiring long-term action. Sometimes, wells have to be drilled to sample the ground water. Site inspectors may wear protective gear, including coveralls and respirators, to protect themselves against any hazardous substances present at the site. Samples collected during the site inspection are sent to a laboratory for analysis to help EPA answer many questions, such as:

- Are hazardous substances present at the site? If so, what are they, and approximately how much of each substance is at the site?
- Have these hazardous substances been released into the environment? If so, when did the releases occur, and where did they originate?
- Have people been exposed to the hazardous substances? If so, how many people?
- Do these hazardous substances occur naturally in the immediate area of the site? At what concentrations?
- Have conditions at the site gotten worse since the preliminary assessment? If so, is an early action or removal needed? (See box above.)

Often, the site inspection indicates that there is no release of major contamination at the site, or that the hazardous substances are safely contained and have no possibility of being released into the environment. In these situations, EPA decides that no further Federal inspections or remedial actions are needed. This decision is referred to as *site evaluation accomplished.* (See page 5 for more details on the *site evaluation accomplished* decision.)

At the completion of the site inspection, a report is prepared. This report is available to the public–call your EPA regional Superfund office for a copy. See page 8 for the phone numbers of these offices.

"During the site inspection, EPA or the State collects samples of the suspected hazardous substances in nearby soil and water."

At sites with particularly complex conditions, EPA may need to perform a second SI to obtain legally defensible documentation of the releases.

Because EPA has limited resources, a method has been developed to rank the sites and set priorities throughout the nation. That method, known as the *Hazard Ranking System*, is the next step in the site assessment process.

4 Hazard Ranking System

EPA uses the information collected during the preliminary assessment and site inspection to evaluate the conditions at the site and determine the need for long-term remedial actions. When evaluating the seriousness of contamination at a site, EPA asks the following questions:

- Are people or sensitive environments, such as wetlands or endangered species, on or near the site?
- What is the toxic nature and volume of waste at the site?
- What is the possibility that a hazardous substance is in or will escape into ground water, surface water, air, or soil?

Based on answers to these questions, each site is given a score between zero and 100. Sites that score 28.5 or above move to the next step in the process: listing on the *National Priorities List*. Sites that score below 28.5 are referred to the State for further action.

5 National Priorities List

Sites that are listed on the *National Priorities List* present a potential threat to human health and the environment, and require further study to determine what, if any, remediation is necessary. EPA can pay for and conduct remedial actions at NPL sites if the responsible parties are unable or unwilling to take action themselves. There are three ways a site can be listed on the National Priorities List:

- It scores 28.5 or above on the Hazard Ranking System;
- If the State where the site is located gives it top priority, the site is listed on the National Priorities List regardless of the HRS score; or
- EPA lists the site, regardless of its score, because all of the following are true about the site:
  - The Agency for Toxic Substances and Disease Registry (ATSDR), a group within the U.S. Public Health Service, issues a health advisory recommending that the local population be *dissociated* from the site (i.e., that the people be temporarily relocated or the immediate public health threat be removed);
  - EPA determines that the site poses a significant threat to human health; and
  - Conducting long-term remediation activities will be more effective than addressing site contamination through early actions.

The list of proposed sites is published in the *Federal Register*, a publication of legal notices issued by Federal agencies. The community typically has 60 days to comment on the list. After considering all comments, EPA publishes a list of those sites that are officially on the National Priorities List. When a site is added to the National Priorities List, the site assessment is completed. Long-term actions take place during the next phase. See page 6 for more details on long-term actions.

Site Evaluation Accomplished

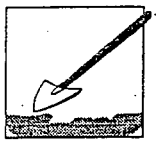
In many instances, site investigators find that potential sites do not warrant Federal action under the Superfund program. This conclusion can be attributed to one of two reasons:

- The contaminants present at the site do not pose a major threat to the local population or environment; or
- The site should be addressed by another Federal authority, such as EPA's Resource Conservation and Recovery Act (RCRA) hazardous waste management program.

When investigators reach this conclusion, the site evaluation is considered accomplished. A site can reach this point at several places during the site assessment process, namely at the conclusion of the preliminary assessment or the site inspection, or once the site is scored under the Hazard Ranking System.

As a Concerned Citizen, How Can I Help ?

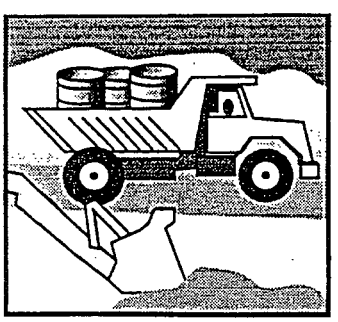
- Read this fact sheet.
- Call EPA with any potential sites in your area.
- Provide EPA with site information.
- Comment on proposed listing of sites on the National Priorities List.
- If the site is listed on the NPL, work with your citizens' group to apply for a technical assistance grant.



Addressing Sites in the Long Term

Once a site is placed on the National Priorities List, it enters the long-term or remedial phase. The stages of this phase include:

- ✓ Investigating to fully determine the nature and extent of contamination at the site, which can include a public health assessment done by the ATSDR;
- ✓ Exploring possible technologies to address site contamination;
- ✓ Selecting the appropriate technologies—also called remedies;
- ✓ Documenting the selected remedies in a record of decision (ROD);
- ✓ Designing and constructing the technologies associated with the selected remedies;
- ✓ If necessary, operating and maintaining the technologies for several years (e.g., long-term treatment of ground water) to ensure safety levels are reached; and
- ✓ Deleting the site from the National Priorities List, completing Superfund's process and mission.



Some Commonly Asked Question

Q: **What exactly is a site?**
A: EPA designates the area in which contamination exists as the "site." Samples are taken to define the area of contamination. At any time during the cleanup process the site may be expanded if contamination is discovered to have spread further.

Q: **How long will it take to find out if a threat exists?**
A: Within one year of discovering the site, EPA must perform a preliminary assessment. The preliminary assessment allows EPA to determine if there is an immediate danger at the site; if so, EPA takes the proper precautions. You will be notified if you are in danger. EPA may also contact you to determine what you know about the site.

Q: **What is the State's role in all these investigations?**
A: The State can take the lead in investigating and addressing contamination. It also provides EPA with background information on (1) immediate threats to the population or environment, and (2) any parties that might be responsible for site contamination. The State shares in the cost of any long-term actions conducted by the Superfund program, comments on the proposal of sites to the National Priorities List, and concurs on the selected remedies and final deletion of sites from the National Priorities List.

Q: **Why are private contractors used to assess sites?**
A: EPA has a limited workforce. By using private contractors, EPA is able to investigate more sites. Also, EPA is able to draw on the expertise of private contracting companies.

Q: **Why are there so many steps in the evaluation process? Why can't you just take away all the contaminated materials right now, just to be safe?**
A: When EPA assesses a site, it first determines if contamination poses any threats to the health of the local population and the integrity of the environment. Dealing with worst sites first is one of Superfund's national goals. By evaluating contamination in a phased approach, EPA can quickly identify sites that pose the greatest threats and move them through the site assessment process. Once EPA understands the conditions present at a site, it searches for the remedy that will best protect public health and the environment. Cost is only one factor in weighing equally protective remedies. Many sites do not warrant actions because no major threat exists. However, if a significant threat does exist, EPA will take action.

about Superfund Sites

Q: **If a site is added to the National Priorities List, how will we know when EPA has completed the cleanup efforts?**

A: EPA notifies the public and requests their comments on the actions proposed to treat site contaminants. In addition, the community is notified when a site will be deleted from the National Priorities List. The entire process can take as long as 7 years; at sites where ground water is contaminated, it can take even longer.

Q: **I live next door to a site and I see EPA and contractor personnel wearing "moon suits." Am I safe?**

A: EPA and contractor personnel wear protective gear because they might actually be handling hazardous materials. Also, these people are regularly exposed to contaminants at different sites and do not always know what contaminants they are handling. EPA takes steps to protect the public from coming in contact with the site contamination. If a dangerous situation arises, you will be notified immediately.

Q: **If a site is added to the National Priorities List, who pays for the activities?**

A: EPA issues legal orders requiring the responsible parties to conduct site cleanup activities under EPA oversight. If the parties do not cooperate, Superfund pays and files suit for reimbursement from responsible parties. The sources of this fund are taxes on the chemical and oil industries; only a small fraction of the fund is generated by income tax dollars.

Q: **How can I get more information on any health-related concerns?**

A: Contact your EPA regional Superfund office for more information. The ATSDR also provides information to the public on the health effects of hazardous substances. Ask your EPA regional Superfund office for the phone number of the ATSDR office in your region.

Q: **How can I verify your findings? What if I disagree with your conclusions?**

A: You can request copies of the results of the site assessment by writing to your EPA regional Superfund office. The public is given the opportunity to comment on the proposal of a site to the National Priorities List and the actions EPA recommends be taken at the site. If a site in your community is listed on the National Priorities List, a local community group may receive grant funds from EPA to hire a technical advisor. Call your EPA regional Superfund office (see page 8) for the location of an information repository and for information on applying for a **technical assistance grant.**

Q: **How can I get further information? How can I get a list of the sites EPA has investigated?**

A: Contact your EPA regional Superfund office (see page 8) for more information and a list of sites in your area.

Important Phone Numbers

For information on the Superfund program or to report a hazardous waste emergency, call the national numbers below.

U.S. EPA Headquarters Hazardous Site Evaluation Division

- Site Assessment Branch
  703-603-8860

Federal Superfund Program Information

- EPA Superfund Hotline
  800-424-9346

Emergency Numbers:

Hazardous Waste Emergencies

- National Response Center
  800-424-8802

ATSDR Emergency Response Assistance

- Emergency Response Line
  404-639-0615

For answers to site-specific questions and information on opportunities for public involvement, contact your region's Superfund community relations office.

EPA Region 1: *Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont*

- Superfund Community Relations Section
  617-565-2713

EPA Region 2: *New Jersey, New York, Puerto Rico, Virgin Islands*

- Superfund Community Relations Branch
  212-264-1407

EPA Region 3: *Delaware, District of Columbia, Maryland, Pennsylvania, Virginia, West Virginia*

- Superfund Community Relations Branch
  800-438-2474

EPA Region 4: *Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee*

- Superfund Site Assessment Section
  404-347-5065

EPA Region 5: *Illinois, Indiana, Michigan, Minnesota, Ohio, Wisconsin*

- Office of Superfund
  312-353-9773

EPA Region 6: *Arkansas, Louisiana, New Mexico, Oklahoma, Texas*

- Superfund Management Branch, Information Management Section
  214-655-6718

EPA Region 7: *Iowa, Kansas, Missouri, Nebraska*

- Public Affairs Office
  913-551-7003

EPA Region 8: *Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming*

- Superfund Community Involvement Branch
  303-294-1124

EPA Region 9: *Arizona, California, Hawaii, Nevada, American Samoa, Guam*

- Superfund Office of Community Relations
  800-231-3075

EPA Region 10: *Alaska, Idaho, Oregon, Washington*

- Superfund Community Relations
  206-553-2711

APPENDIX A

REFERENCE LIST

Appendix A

Reference List

Site: Devoe Marine Coatings

1. U.S. Environmental Protection Agency, Envirofacts Superfund CERCLIS Query Results, http://www.epa.gov/enviro/index_java.html, data extracted March 18, 2002

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3. U.S. Geological Survey, Riverside Quadrangle, California, Riverside County, 7.5 minute series (topographic), Photorevised 1980, North American Datum 1983

4. U.S. Environmental Protection Agency, Geographical Information System (GIS)

5. U.S. Environmental Protection Agency, Resource Conservation and Recovery Information System (RCRIS) database

6. Cal/EPA, Department of Toxic Substances Control's Calsites database

7. Hazard Ranking System Guidance Manual for HRS QuickScore Version 1.0 software use to score the subject site, http://www.epa.gov/superfund/sites/npl/hrsres/, data extracted January 18, 2002

8. Johnson, Julie, Department of Toxic Substances Control, Library Search For Files on Site or Sites within Vicinity, March 20, 2002

9. Pagan, Joseph, Retiree of Devoe Marine Coatings, Site Information Retrieval and Site Reconnaissance & Interview and Sampling Assistance, March 20, 2002, April 12, 2002, & April 30, 2002

10. Kovalak, Robert, ICI Industries (Glidden), Information Retrieval and Field Visits and Site Sampling Arrangements, March 21, 2002 through May 15, 2002

11. Olsen-Martin, Nancy, California Regional Water Quality Control Board – Santa Ana Region, Request for Previous Soil Vapor and Groundwater Sampling Results, April 19, 2002

12. Berman, Michael, The Source Group, Assisted during Site Groundwater Sampling, April 30, 2002

13. Randall, Dan, City of Riverside – Water Operations, Drinking Water Well Information Retrieval, March 26, 2002

14. Appel, Steve, Rubidoux Community Services District, Drinking Water Well Information Retrieval, April 24, 2002

15. Dotson, Theresa, Riverside Highland Water Company, Drinking Water Well Information Retrieval, April 24, 2002

16. Bryant, Roy, Riverside County Department of Environmental Health – Hazmat Division, Information Request Regarding USTs Removal, May 31,2002

17. Tasnif-Abbasi, Maryam & Carlson, Kurt, URS Consultants, Inc. , CERCLA Preliminary Assessment dated December 18, 1992 submitted to EPA Region IX for Devoe Marine Coatings

18. Regional Water Quality Control Board - Santa Ana Region, "No Further Action" Closure Letter and Summary, dated June 17, 1997

19. Kovalak, Robert R., ICI Paints North America (Glidden), Groundwater Sampling Results (1999) for MW-1 and MW-5 & SVE Testing Results (1999) –Old System Configuration Data Tables, dated August 18, 1999

APPENDIX B

PHOTOGRAPHIC DOCUMENTATION

APPENDIX B
Photographic Documentation

Photograph taken from the inside of the former Devoe facility of the front gate towards the eastern direction.

Photograph taken of southern chain-link fence topped with the barbed wire.

APPENDIX B
Photographic Documentation

Photograph taken of the northern low (light blue) concrete wall in front of the high concrete wall of the adjacent property to the north of the former Devoe facility.

Photograph taken of the western low (light blue) concrete wall surrounding the former Devoe facility and neighboring the abandoned cement company to the west.

APPENDIX B
Photographic Documentation

Photograph taken of the Devoe site after all the buildings were removed and the site is all dirt and spread with sparse vegetation.

Another view taken of the dirt and sparse vegetation of what used to be the Devoe facility.

APPENDIX B
Photographic Documentation

Photograph taken of the Soil Vapor Extraction System (Thermal Oxidizer Unit) on-site permitted by the South Coast Air Quality Management District.

Photograph of the vapor extraction well manifold adjuster.

APPENDIX B
Photographic Documentation

View of the U-Haul truck rental company to the north of the former Devoe property through the partially fenced area.

Using the PID unit to take reading measurements of monitoring wells before collecting groundwater samples using bailers.

APPENDIX B
Photographic Documentation

Using disposable scoopers to collect surface soil samples to analyze for metals.

Shovel used to collect soil samples at 1 foot deep at the former Devoe facility.